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Mr. Chairman, members of the Committee, thank you for inviting me to speak to you today about S. 2107**,** the "Government Paperwork Elimination Act." The Administration shares this Committee's goal of enabling electronic commerce and supporting the use of the Internet to facilitate the exchange of information and communication between the Federal government and the American people.

The Internet is quickly becoming the most widespread and accessible information technology medium in the world. It holds the promise of improving many facets of our lives. President Clinton has compared the potential of electronic commerce to the steam engine, electricity and the industrial revolution, stating, "Today, we are on the verge of another revolution. Inventions like the integrated circuit, the computer, fiber optic cable, and the Internet are changing the way we work, learn, and communicate with each other." The private sector is leading in the use of the Internet to provide a wide variety of goods and services to consumers. Different companies are employing different approaches, with no certainty as to what the successful business models will eventually look like.

Another aspect of our lives that the Internet can improve is how the government delivers services to its constituents. Vice-President Gore has articulated the ambitious goal of this Administration in reinventing government through technology by stating, "It will be a government where all Americans have the opportunity to get services electronically and where, aided by technology, the productivity of government operations will be soaring." Secretary Daley has enthusiastically embraced this goal, pledging to make the Department of Commerce a model in the use of electronic technologies. All Federal agencies are examining how best to take advantage of the possibilities afforded by the Internet. We are providing extensive, and increasing, electronic or on-line availability of government forms and applications. Additionally, the Executive Branch is making extensive use of the World Wide Web to interact with the public about agency programs, regulations and policies, employment opportunities, and other government activities, as well as ensuring the electronic availability of requests for proposals for the provision of goods and services. Let me provide you with some examples:

- Taxpayers can download hundreds of Internal Revenue Service tax forms, publications and other information on-line, and can gain access to electronic filing products and services provided by the private sector.

- World Wide Web users can access and file electronically a form with the Social Security Administration to request a Personal Earnings and Benefit Estimate Statement be mailed to them. This Statement includes Social Security earnings history, how much in Social Security taxes has been paid into the program, how to qualify for benefits and estimates of future benefits.

- The Department of Education has developed an electronic Free Application for Federal Student Aid (FAFSA). FAFSA Express is an easy, convenient, and for the most part, paperless way for students to apply for financial aid.

- The Department of Housing and Urban Development pilot program in San Antonio, Texas, enables bidders for HUD-controlled single family homes in the area to offer bids electronically using the Internet.

- The Treasury Department has initiated a demonstration project, along with the Social Security Administration and the Labor Department, to streamline electronic tax and wage reporting for the nation's business community.

- The General Services Administration now provides on-line access to GSA Advantage!, an electronic catalog that, when complete, will list all of the more than four million items it offers for sale to Federal government agencies.

- On June 30, 1998, the United States Government made its first Internet payment when the Department of the Treasury issued an "echeck" to GTE Corporation for work on an Air Force contract. The echeck program allows a company to issue a digital check, signed with a secure digital signature, and e-mail it to its creditor, who, in turn, can verify the check, endorse it with its digital signature, and e-mail it to its bank. The program will be tested over the next year with roughly 50 government contractors.

- Just last week, the Treasury's Bureau of Engraving and Printing began a three-month pilot project to fill collectibles (e.g., commemorative coins) orders submitted by a group of up to 200 cardholders with special card readers and related software on their personal computers. The project relies on so-called "smart" cards and the credit cards SET (Secure Electronic Transaction) standard -- the first such use in North America.

- Here at the Department of Commerce, the International Trade Administration's homepage provides U.S. exporters with instant information on trade leads, financing, "How-to" publications and software, export assistance by e-mail, information on foreign tariffs, taxes and customs information. Our Bureau of Export Administration last week announced plans to receive export license applications and other submissions over the Internet. And, our Patent and Trademark Office is rapidly expanding its searchable patent and trademark databases, which by the end of the year will have detailed information on

all registered trademark and pending trademark applications and all patents issued from 1976 to the present. At the National Institute of Standards and Technology (NIST), Internet users can download the latest Standard Reference Data, receive electronic versions of its "Journal of Research" and synchronize their PC's clock to the NIST's Atomic clock, the nation's timepiece. Through the National Technical Information Service website, users can identify 370,000 technical publications, datafiles, CD-Roms, and audiovisual materials that have been produced in the last 10 years and, beginning next month, will be able to order and pay for these products via the Internet.

The Executive Branch is also improving its capacity to use a variety of authentication and related technologies to expand and enhance the government's use of electronic commerce technologies, depending on the type of transaction involved, including password techniques, cryptography and secure operating systems. For example, the Bureau of Engraving and Printing project noted above employs digital signature technology, including both conventional algorithms and newer, elliptic curve cryptography. The Federal Public Key Infrastructure (PKI) Steering Committee, chartered by the Government Information Technology Services Board, is working with government agencies and industry to field on a pilot basis a comprehensive network-based infrastructure to support cryptographic digital signatures as a cross-cutting enabling technology. A digital signature infrastructure can facilitate a broad range of services including tax filings, regulatory submissions, student and small business loans, benefit applications, grants, and many more. The Federal government is developing a PKI through a careful process of implementing products and services in cooperation with industry, articulating sound business practices governing agency use of the PKI, and conducting approximately 35 pilot demonstration projects to explore the many ways in which public key cryptography can enhance agency operations and promote interactions with citizens and companies.

The Administration supports the objectives of S. 2107. We share the bill's overall goal of enhancing electronic commerce in the governmental sector by making government forms available electronically. We also share the goal of ensuring that paper-based legal barriers do not hamper electronic transactions with the government. However, as the list of initiatives I have just described suggests, government agencies are already quite active in this area, and we believe that enactment of detailed rules and restrictions would hinder rather than promote government activities in this area.

The Administration, therefore, recommends that several principles guide consideration of any legislative proposal concerning the use of electronic commerce technologies by the Federal Government. First, any electronic commerce legislation should be restricted to the Federal government's use of electronic commerce to interact with its constituents and customers. As I noted earlier, as the private commercial marketplace is still experimenting with the multitude of possibilities that are offered by this emerging technology, the government should not take any action that would unduly skew or influence the market. The Administration strongly opposes any legislation at this time that would regulate private commercial uses of electronic commerce.

Second, legislation should be enabling and minimalist, not prescriptive and detailed. Government applications within this sphere are still evolving, and no particular approach to electronic transactions should be mandated at this time. For example, it would be premature to mandate that electronic authentication be used in all Federal electronic transactions, as there may be times when authentication is not necessary.

Third, any legislation should be technology neutral -- that is, it should not favor or convey a competitive advantage or disadvantage upon a particular technology. While the Administration broadly supports the attempt under S. 2107 to ensure that standards do not inappropriately favor one technology over another, we are concerned that, as currently drafted, this legislation conveys at least the impression of specially endorsing technologies that rely on trusted third parties and certification for their effectiveness. While "digital signature" technology is an important electronic authentication technology, it is not the only method currently or potentially useful in Federal agency business. A "one-size-fits-all" approach to electronic communications does not adequately reflect the range of electronic authentication technologies and processes available or the varying needs of the government. For example, transactions not involving payments may present less of a need to verify the authenticity of a document or require a less stringent level of assurance than payment transactions. Other forms of electronic authentication -- for example, personal identification numbers, digitized signatures or voice signatures, to name a few -- may be more accessible to the public and more appropriate for many uses. A technology-specific approach also could stifle innovation and hamper technology and standards development.

We are also concerned that legislation regarding particular authentication approaches might spill into the private commercial marketplace. Contrary to our approach, some countries appear to favor mandates and regulations specifying private sector use of particular authentication technologies and methods. We are strongly opposed to that approach because the market now is experimenting with a variety of authentication technologies and business practices and we do not know what the outcome of that experimentation will be. For example, will industry have one electronic "identifier" for use in all electronic transactions, or will the different commercial entities involved -- employers, banks, credit card companies and others -- issue their own identifiers? Will parties rely on third-party issuers of certificates or not? The diversity of business models emerging in global commerce strongly counsels against establishing limited methodologies and means that will govern the authentication of electronic transactions.

Any electronic commerce law should also avoid impairing internal operations and activities of Federal agencies. By prohibiting agencies from acting as digital signature certification authorities except for their own employees, S. 2107 could interfere with existing intragovernmental systems, for example, the current system under which the Treasury Department makes payments on behalf of other Federal agencies. This would not only add cost and inefficiency to the existing electronic processes, but by also adding an unnecessary third party would increase security risks.

Legislation in this area should also be timing-neutral. It should avoid forcing agencies, industries or other entities to prematurely select particular technologies from among developing or competing alternatives, or to adopt particular standards within unduly tight time constraints. Under S. 2107, the Director of the Office of Management and Budget would have only 12 months to establish a government-wide method and guidelines for accepting electronic

signatures. These deadlines would impose an arbitrary constraint on agencies that are already engaged in concerted efforts to facilitate the use of electronic communications and may exceed the capabilities of some agencies' existing technology systems. These deadlines may also be unrealistic due to constraints on existing Federal government resources currently being directed at the Y2K problem. Such deadlines may also be too tight to allow for adequate consultation with industry, consumers and interested state and local governments.

The legislation also includes provisions that would hinder the Treasury's receipt and disbursement of electronic payments. For example, the bill would require that any payment associated with a form submitted electronically not exceed the payment associated with any corresponding printed versions of such form. This could be interpreted as forcing Federal agencies to absorb processing charges for credit card assisted payments. In addition, the bill requires that not less than two methods of electronic payment be available when only one method may be sufficient or available. Most of the currently available methods for electronic payments are of limited use or pose particular problems for the Federal government. For example, one of the most viable mechanisms currently available, credit cards, would not be available to the Internal Revenue Service, which is prohibited by the Taxpayer Relief Act from paying fees.

Legislation in this area also should recognize existing or future Executive Branch coordinating or standards setting mechanisms. For example, under the Computer Security Act, the Department of Commerce has responsibility for developing Federal Information Processing Standards. The National Security Agency is the lead agency with respect to information processing standards involving national security systems. The National Archives and Records Administration is working to ensure the proper maintenance and preservation of agency records in electronic form. Treasury leads Administration efforts relating to federal payments and electronic collection systems. Justice is concerned with addressing evidentiary and enforcement issues raised by the use of electronic transmissions in both civil and criminal contexts.

Electronic commerce has experienced phenomenal growth over the past year, with no consensus yet as to the best practices or preferred mechanisms to address issues such as authentication. Given the rapid expansion and evolution of electronic commerce, we believe that legal changes in this area should follow market developments, rather than attempt to lead innovations. As this Committee considers legislation in this area, we would strongly urge you to focus on a minimalist approach that affords sufficient flexibility to adapt to the changes that are inevitable in this nascent technology. I look forward to working with this Committee to ensure that Federal efforts to support electronic commerce and authentication meet our shared goals.